

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A database processing system, comprising:

a first portion for accessing data from a second portion;

a third portion for enabling user interaction with said first portion such that a frame based knowledge tree is automatically constructed with said data in response to said user interaction.

2. The system of claim 1, wherein said first portion comprises an induction module.

3. The system of claim 2, wherein said second portion comprises a vendor database and said data comprises specification data for at least one product.

4. The system of claim 2, wherein said second portion comprises a plurality of tables following a relational schema.

5. The system of claim 2, wherein said third portion comprises a graphical user interface coupled to said first portion.

6. The system of claim 3, further comprising:

a database access module coupled between said vendor database and said first portion for enabling access to said vendor database.

7. The system of claim 2, further comprising:

a product knowledge output module coupled to an output of said induction module for converting said frame based knowledge tree into product knowledge files for use with a configuration system.

8. A data processing method, the method comprising:

accessing data from a database;

receiving indications from a user regarding said data; and

automatically constructing a frame based knowledge tree from said data in response to said act of receiving.

9. The method of claim 8, wherein said act of accessing comprises:

accessing a vendor database table containing product data for a product.

10. The method of claim 8, wherein said act of accessing comprises:

accessing a plurality of tables following a relational schema.

11. The method of claim 8, wherein said act of receiving comprises:

receiving user preferences regarding construction of said frame based knowledge tree via a user interface.

12. The method of claim 8, wherein said act of constructing comprises:

identifying at least one product attribute in said data;

identifying at least one unique attribute value associated with said at least one product attribute; and

creating a new node of said knowledge tree for each unique attribute value identified.

13. The method of claim 12, further comprising:

identifying at least one user-specified attribute to be inducted into said knowledge tree; and

querying said data for at least one unique attribute value associated with said user-specified attribute.

14. The method of claim 12, further comprising:

determining there are no user-specified attributes;

querying said data for all remaining attributes yet to be inducted into said knowledge tree;

determining whether the quantity of said remaining attributes exceeds a predetermined number; and

inducting said remaining attributes based on whether said quantity exceeds said predetermined number.

15. The method of claim 14, further comprising:

determining said quantity of remaining attributes does not exceed said predetermined number; and

adding a new compound slot to said frame based knowledge tree including at least two of said remaining attributes.

16. The method of claim 14, further comprising:

determining said quantity of remaining attributes does exceed said predetermined number; and

processing said remaining attributes using at least one of domain knowledge and distinct attribute values count.

17. A method of automatically constructing a frame tree, the method comprising:

identifying a plurality of attributes within a vendor database to be inducted into a frame based knowledge tree;

automatically determining respective locations of said plurality of attributes within said knowledge tree; and

inserting at least one of said attributes into said knowledge tree based on said determined respective locations.

18. The method of claim 17, wherein said act of automatically determining comprises:

identifying user preferences for constructing said knowledge tree; and

determining said respective locations based on said user preferences.

19. The method of claim 18, wherein said act of identifying comprises:

determining that a user has employed a domain knowledge specification for constructing said knowledge tree.

20. The method of claim 18, wherein said act of identifying comprises:

determining that a user has employed a distinct attribute values count for constructing said knowledge tree.

21. The method of claim 17, wherein said act of identifying comprises:

querying at least one vendor-supplied product knowledge database table for said attributes.

22. The method of claim 17 further comprising:

converting said frame based knowledge tree into at least one product knowledge file for use with a configuration system.